

***Detailed Action***

Status of claims. Claims 11, 13, 18, 20-25, 55-57 and 60-73 are currently pending. Claims 11, 13, 20, 23, 57 and 60 have been amended, and claims 61-73 have been added by Applicants' amendment filed on 05-14-2010.

The examiner contacted Applicants' representative, Anne Carlson, to discuss a proposed claim amendment to overcome rejection of claims 12, 13 and 57 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, rejection of claims 11-13, 18-25 and 55-60 under 35 U.S.C. 112, first paragraph, scope of enablement, and rejection of claim 57 under 35 U.S.C. 112, second paragraph, to set forth the claims in condition for allowance.

Authorization for the examiner's amendment was given in a telephone interview with Anne Carlson on July 21, 2010 and July 22, 2010.

With respect to the proposed claims, an examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the issue fee.

***In the claims,***

Correct claims 11, 23, 57, 60, 64 and 68 as follows:

- 11) Page 2, line 2 of claim 11, the term "(DDR1)," is replaced by --"(DDR1)--;
- 23) Page 3, line 2 of claim 23, the term "cell," is replaced by --cell --;
- 57) Page 4, line 3 of claim 57, the phrase "and releases chemokines" is replaced by -- the release of differentiation agent-mediated chemokines --;

- 60) Page 4, line 2 of claim 60, the term “(DDR1),” is replaced by --“(DDR1)--;  
64) Page 5, line 2 of claim 64, the term “(DDR1),” is replaced by --“(DDR1)--;  
68) Page 6, line 2 of claim 68, the term “(DDR1),” is replaced by --“(DDR1)--;

***Reasons for allowance***

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or suggest of:

A method of enhancing maturation of an immature macrophage or an immature dendritic cell that expresses Discoidin Domain Receptor 1 (DDR1) comprising:

contacting the immature macrophage or the immature dendritic cell with an effective amount of a DDR1-activating antibody that specifically binds DDR1 in the presence of a differentiation agent that comprises granulocyte-macrophage-colony stimulating factor (GM-CSF), interleukin-4 (IL-4), tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ), or a combination thereof, wherein the DDR1-activating antibody enhances the differentiation agent-mediated maturation of the immature macrophage or the immature dendritic cell, thereby enhancing maturation of the immature macrophage or the immature dendritic cell that expresses DDR1.

The closest art of Lipford et al., (US provisional application No. 60/309,260, filed on Aug. 1, 2001) discloses the DDR1 as one of the markers expressed in dendritic cells, however, DDR1 was not activated, upregulated or modulated by CpG oligonucleotides.

***Withdrawn Rejections in response to Applicants' arguments or amendments***

***Claim Rejections - 35 USC § 112- First paragraph- New Matter***

In view of Applicants' amendment of claims 11, 13, 20, 23, 57 and 60, rejection of claims 12, 13 and 57 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement has been withdrawn.

***Claim Rejections - 35 USC § 112-First paragraph-Scope of Enablement***

In view of Applicants' amendment of claims 11, 13, 20, 23, 57 and 60, rejection of claims 11-13, 18-25 and 55-60 under 35 U.S.C. 112, first paragraph, scope of enablement has been withdrawn.

***Claim Rejections - 35 USC § 112- Second Paragraph***

In view of Applicants' amendment of claim 57, rejection of claim 57 under 35 U.S.C. 112, second paragraph has been withdrawn.

***Conclusion***

Claims 11, 13, 18, 20-25, 55-57 and 60-73 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Leavitt whose telephone number is 571-272-1085. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach, Ph.D can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1633; Central Fax No. (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Maria Leavitt/

Maria Leavitt  
Primary Examiner, Art Unit 1633